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# CEANOTHUS CYANEUS

## LAKESIDE WILD-LILAC

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RANCHO SANTA ANA BOTANIC GARDEN
of the
NATIVE PLANTS OF CALIFORNIA
Santa Ana Cañon, Orange County, California
Established 1927 in Memory of
JOHN W. BIXBY

# CEANOTHUS CYANEUS
# LAKESIDE WILD-LILAC

*Rhamnaceae* Buckthorn Family

Evergreen shrub 10-15 ft. high, of equal spread, usually of open growth habit. Main trunk 4-8 in. in dam., very short, giving rise to several branches 2-3 in. in diam., with a smooth, light or whitish-green bark for several years. Branchlets with light green bark, frequently covered with small black pustules. Leaves alternate, microscopically hairy; petioles usually less than $\frac{1}{4}$ in. long; blades 1-2 in. long, $\frac{1}{2}$-1 in. wide, elliptic or rounded at base, broadest below middle, tapering to a slightly acute tip, upper surface dark green, glossy, lower surface lighter or glaucous-green; principal veins 3, arising from base; margins serrate, teeth inconspicuous, glandular-tipped. Flower clusters terminal, borne on new growth, composed of simple or compound panicles of several hundred flowers, with pedicels, sepals and petals colored alike, varying from light to intensely deep shades of violet, unopened flowers much deeper in color than open ones; pedicels about $\frac{1}{4}$ in. long; unopened flower a little over $\frac{1}{8}$ in. across; calyx 5-parted, lower half adnate to ovary; sepals separate slightly as flower opens, allowing the 5, clawed petals and stamens to protrude; filaments 1/16 in. long, similar in color to calyx; anthers yellow, 2-celled; ovary 3-celled, set on a fleshy disc; style 1/16 in. long, 3-cleft. Fruit a 3-celled, strongly 3-lobed, dry, dehiscent, subglobose capsule, over $\frac{1}{8}$ in. across, containing 3 light green or greenish-tan seeds 1/16 in. in diam., nearly spherical, but flattened on one face. In germination the cotyledons appear above ground, are short-petioled, have an oval blade less than $\frac{1}{4}$ in. long; first few leaves opposite, have coarse teeth, 3 main veins from base, petioles $\frac{1}{4}$ in. long, blades $\frac{1}{2}$ in. long; a long taproot is soon developed. Flowers mainly April to early June; seeds ripen in June and July.

The genus *Ceanothus* (from an ancient Greek word for some spiny plant; used for this group for no apparent reason) consists of about 55 species of North America, of which about 44 are found in California, the remainder range from Canada to Guatemala and east to the Atlantic coast. C. *americanus,* the first species to be described, is known as New Jersey Tea, and its leaves were the source of a tea substitute in Revolutionary War days.

*Ceanothus cyaneus* (Latin for dark blue) was described in 1927 by Miss Alice Eastwood (Curator of the Herbarium of the California Academy of Sciences for more than 50 years, and the most beloved woman botanist of all time in California). The original specimen was collected near Lakeside, San Diego Co., in April, 1920 by Myrtle Phillbrook. The species is also known from several other chaparral-covered hillsides, most of which are less than 15 miles away. C. *cyaneus* is one of the rarest species of the genus and there are only a few thousand wild plants, whereas, some species are represented by millions of plants. Dr. W. L. Jepson in his treatment of the genus (Flora of

California 2: 473. 1936) reduced C. *Cyaneus* to synonymy under C. *tomentosus* var. *olivaceus,* which has leaves with considerable pubescence beneath, and much smaller and less showy heads of flowers.

Soon after its discovery, C. *cyaneus* was introduced into horticulture, and both Miss Kate Sessions, of San Diego, and Mr. Theodore Payne of Los Angeles, offered it for sale several years before it was officially named. Its profusion of dark, violet-blue flowers made it a highly desired plant.

We have propagated C. *cyaneus* since 1928, when we obtained a few seeds from cultivated plants. In July, 1930 we collected seeds from wild plants at Lakeside, and all of the plants of this species now growing in the Garden are either from this lot of seeds, or from its descendents. Practically all of the several thousand plants which we have grown have been propagated from seeds, but a few have been from cuttings taken in April. Seeds should be planted in flats in the late fall or early spring. Germination is hastened if the seeds are placed in water at 160 degrees F. and allowed to soak for 24 hours before planting. Care should be exercised in potting to avoid coiled roots, and gallon cans or larger are preferable to pots. In very rich soil the plants are likely to die from fungus attacks on their roots, especially during the warm summer months when frequent watering is necessary. Fall is the ideal time for setting out the plants in their permanent places. They are thus able to become well established before the next summer, and will need little or no irrigation. The site should be sunny or only partially shaded, and in coarse, well-drained soil. There should be no other plants nearby which require irrigation, for when once established, this species requires no irrigation. Heavy clay soils, or low, poorly-drained spots are unsuitable. Under such conditions the plants usually make very rapid growth, bloom profusely for a year or two, then suffer a decline and die quickly from fungus diseases on their roots.

Many gardeners desire to grow C. *cyaneus,* despite its short life and lack of good foliage during much of the year. One large nurseryman offers grafted plants, so that dark colored flowers are assured. The Santa Barbara Botanic Garden is conducting experiments in grafting this species onto the roots of C. *spinosus* and *thyrsiflorus* to get a more water-tolerant root system. That Garden also has an early flowering plant which is a supposed hybrid of C. *cyaneus* that has been named "La Primavera". Scientific plant breeding may eventually result in the production of forms of *Ceanothi* with the beauty of flowers of C. *cyaneus,* plus an all year good foliage, and a root system tolerant of average garden soils and moisture. In the meantime, we believe that most of the species of *Ceanothi* are somewhat disappointing in the average garden. They are, however, splendid for naturalizing on dry banks and other places where little care or irrigation can be given. We base our conclusions on the experiences we have gained in growing more than 260 separate lots of *Ceanothi,* which have comprised close to 20,000 plants, as well as on our observations on the general cultivation and usage of the group in California over the past 20 years.

CARL B. WOLF

## RANCHO SANTA ANA BOTANIC GARDEN

Dedication of Garden Foundation to the Board of Trustees for the Rancho Santa Ana Botanic Garden of the Native Plants of California:

"THE NATURE, OBJECT AND PURPOSE OF THE INSTITUTION HEREBY FOUNDED AND TO BE MAINTAINED HEREUNDER.

ITS NATURE: A botanic garden of the native plants of California, herbarium and botanical library, containing living and/or preserved specimens of trees, plants and flowers native to California, and literature relating thereto.

ITS OBJECT: The preservation and improvement of the property now transferred and such property as may hereafter be transferred to the Trustees for those who not only wish to enjoy, but to study, assembled in one accessible locality, native California plants; and for the advancement of science and education with reference to plant life indigenous to the State of California.

ITS PURPOSES: (a) An institution founded primarily for scientific research in the field of local botany.

(b) To preserve the native California flora, try to replenish the depleted supply of some of the rarest plants which are rapidly being exterminated, and bring together in a comparatively small area as complete a collection of the rich store of native California plants as can be grown in this southern section of the state, thereby promoting the general welfare of the people of the state by providing the means for encouraging and carrying on the above mentioned activities in said state and by doing such other things as may be necessary and desirable to carry out the objects hereof."

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